DETAILED ACTION

1. This is a final action on the merits in response to the reply received 12/15/2011.

Claims 1-2, 4-10, and 12-14 have been canceled. Claims 3 and 11 have been amended and are pending. Furthermore, claims 15-18 have been newly added.

Response to Arguments

2. Applicant's arguments with respect to claim 3, 11, 15-18 have been considered but are moot in view of the new ground(s) of rejection.

3. Furthermore, Applicant argues that Apostolopoulos does not teach or disclose "reconstructing a frame of even scanning lines using a corresponding frame of odd scanning lines and a previous frame comprising even scanning lines." However, examiner respectfully disagrees. In a different embodiment, Apostolopoulos discloses reconstructing a frame of even scanning lines using a corresponding frame of odd scanning lines (Fig. 7, shows a decoder (572) which reconstructs elements 554 and 556. Therefore, while reconstructing the frame of even scanning lines (element 556), the prior art uses the frame of odd scanning lines, element 554).

Invoking - 35 USC § 112, 6th

4. The following is a quotation of the sixth paragraph of 35 U.S.C. 112:

> An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof

5. Claims 11 invokes 35 USC § 112, 6th because the claim limitation meets the 3-prong test by using the phrase "means for " or "step for", the "means for " or "step for is modified by functional language, and the phrase "means for " or "step for" is not

modified by sufficient structure, material, or acts for achieving the specified function. Therefore, the claim limitation is being treated under 35 U.S.C. 112, sixth paragraph

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3, 11, 15-18 rejected under 35 U.S.C. 103(a) as being unpatentable over US2002/0116715A1 APOSTOLOPOULOS, in view of US Patent 6618094B1 De Haan et al (Hereinafter referred to as "De Haan").

8. **Regarding claim 3, Apostolopoulos discloses a method of receiving a progressive video sequence comprising**(see Fig. 2, and Fig. 3)**:**

receiving an encoded stream of even fields and an encoded stream of odd fields from a network (see Fig.3, element 332; the receiver 332 is receiving encoded streams 356 and 354)**;**

decoding the encoded stream of even fields and the encoded stream of odd fields using a plurality of decoders to generate a decoded stream of even fields and a decoded stream of odd fields (See Fig. 3, elements 320 and 322; [0062]; Fig 3 shows a plurality of decoders that generates a decoded stream)**;**

Merges the decoded stream of even fields and the decoded stream of odd fields, wherein the decoded stream of even fields comprises frames of even scanning lines and the decoded stream of odd fields comprises frames of odd scanning lines (Fig 3, element 332)**;**

reconstructing a frame of even scanning lines using a previous frame comprising even scanning lines (Fig 5 is a detailed view of Fig 3, element 332. Fig 3 shows reconstruction of a frame of

even scanning lines. Therefore, if Fig 5 is a detailed view of Fig 3, element 332 and Fig 5 contains previous frames, then Apostolopoulos discloses using a precious frame to reconstruct a frame of even scan lines)**; and**

regrouping the streams and the reconstructed frame to form a progressive video sequence (See Fig. 2, element 294, [0050], lines 6-9, Fig. 3, element 324, Also, Apostolopoulos' term "reconstructing" is equivalent to applicant's term "regrouping")**.**

Apostolopoulos doesn't explicitly disclose reconstructing a frame of even scanning lines using a corresponding frame of odd scanning lines and a previous frame comprising even scanning lines.

However, in a different embodiment, Apostolopoulos discloses reconstructing a frame of even scanning lines using a corresponding frame of odd scanning lines (Fig. 7, shows a decoder (572) which reconstructs elements 554 and 556. Therefore, while reconstructing the frame of even scanning lines (element 556), the prior art uses the frame of odd scanning lines, element 554).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the method disclosed by Apostolopoulos to disclose reconstructing a frame of even scanning lines using a corresponding frame of odd scanning lines and a previous frame comprising even scanning lines as taught by a different embodiment of Apostolopoulos, in order to save hardware in the sender and receiver ([0110], lines 1-2).

Furthermore, Instant applicant's specification discloses an interlacer. A deinterlacer performs the opposite of interlacing, and the merge block of Apostolopoulos can be interpreted as the applicant's de-interlacer, Nevertheless, Apostolopoulos doesn't explicitly disclose a de-interlacer.

However, in the same field of endeavor, De Haan discloses a de-interlacer (Fig 1, Column 2, line 61, "three field de-interlacer")

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the method disclosed by Apostolopoulos to

disclose deinterlacing using a deinterlacer, as taught by De Haan, in order to reduce cost and improve performance (De Haan, Column 4, line 49-65).

9. **Regarding claim 11, Apostolopoulos discloses a device for receiving a progressive video sequence from a network comprising** (See Fig. 3, element 332)**:**

means for receiving multiple streams of encoded signals (See Fig. 3, element 332)**;**

means for separately decoding the multiple streams of signals (See Fig 3, elements 320 and 322)**;**

means for reconstructing a frame of even scanning lines using a previous frame comprising even scanning lines (Fig 5 is a detailed view of Fig 3, element 332. Fig 3 shows reconstruction of a frame of even scanning lines. Therefore, if Fig 5 is a detailed view of Fig 3, element 332 and Fig 5 contains previous frames, then Apostolopoulos discloses using a precious frame to reconstruct a frame of even scan lines)**;and**

means for regrouping the decoded streams into the video sequence and the reconstructed frame to form a progressive video sequence (See fig. 3, element 324).

Apostolopoulos doesn't explicitly disclose a means for reconstructing a frame of even scanning lines using a corresponding frame of odd scanning lines and a previous frame comprising even scanning lines.

However, in a different embodiment, Apostolopoulos discloses means for reconstructing a frame of even scanning lines using a corresponding frame of odd scanning lines (Fig. 7, shows a decoder (572) which is means for and reconstructs elements 554 and 556. Therefore, while reconstructing the frame of even scanning lines (element 556), the prior art uses the frame of odd scanning lines, element 554).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the method disclosed by Apostolopoulos to disclose a means for reconstructing a frame of even scanning lines using a corresponding frame of odd scanning lines and a previous frame comprising even scanning lines as taught by a different

embodiment of Apostolopoulos, in order to save hardware in the sender and receiver ([0110], lines 1-2).

Furthermore, Instant applicant's specification discloses an interlacer. A deinterlacer performs the opposite of interlacing, and the merge block of Apostolopoulos can be interpreted as the applicant's de-interlacer, Nevertheless, Apostolopoulos doesn't explicitly disclose a means for de-interlacing a decoded stream of signals.

However, in the same field of endeavor, De Haan discloses a means for de-interlacing (Fig 1, Column 2, line 61, "three field de-interlacer")

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the method disclosed by Apostolopoulos to disclose a means for deinterlacing using a deinterlacer, as taught by De Haan, in order to reduce cost and improve performance (De Haan, Column 4, line 49-65).

10. Regarding claim 15, Apostolopoulos discloses a method of receiving a progressive video sequence comprising(see Fig. 2, and Fig. 3)**:**

receiving an encoded stream of even fields and an encoded stream of odd fields from a network(see Fig.3, element 332; the receiver 332 is receiving encoded streams 356 and 354)**;**

decoding the encoded stream of even fields and the encoded stream of odd fields using a plurality of decoders to generate a decoded stream of even fields and a decoded stream of odd fields (See Fig. 3, elements 320 and 322; [0062]; Fig 3 shows a plurality of decoders that generates a decoded stream)**;**

Merges the decoded stream of even fields and the decoded stream of odd fields, wherein the decoded stream of even fields comprises frames of even scanning lines and the decoded stream of odd fields comprises frames of odd scanning lines (Fig 3, element 332)**;**

reconstructing a frame of odd scanning lines using a previous frame comprising odd scanning lines (Fig 5 is a detailed view of Fig 3, element 332. Fig 3 shows reconstruction of a frame of even scanning lines. Therefore, if Fig 5 is a detailed view of Fig 3, element 332 and Fig 5 contains

previous frames, then Apostolopoulos discloses using a precious frame to reconstruct a frame of even scan lines)**; and**

regrouping the streams and the reconstructed frame to form a progressive video sequence (See Fig. 2, element 294, [0050], lines 6-9, Fig. 3, element 324, Also, Apostolopoulos' term "reconstructing" is equivalent to applicant's term "regrouping")**.**

Apostolopoulos doesn't explicitly disclose reconstructing a frame of odd scanning lines using a corresponding frame of even scanning lines and a previous frame comprising odd scanning lines.

However, in a different embodiment, Apostolopoulos discloses reconstructing a frame of odd scanning lines using a corresponding frame of even scanning lines (Fig. 7, shows a decoder (572) which reconstructs elements 554 and 556. Therefore, while reconstructing the frame of odd scanning lines (element 554), the prior art uses the frame of even scanning lines, element 556).

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the method disclosed by Apostolopoulos to disclose reconstructing a frame of odd scanning lines using a corresponding frame of even scanning lines and a previous frame comprising odd scanning lines as taught by a different embodiment of Apostolopoulos, in order to save hardware in the sender and receiver ([0110], lines 1-2).

Furthermore, Instant applicant's specification discloses an interlacer. A deinterlacer performs the opposite of interlacing, and the merge block of Apostolopoulos can be interpreted as the applicant's de-interlacer, Nevertheless, Apostolopoulos doesn't explicitly disclose a de-interlacer.

However, in the same field of endeavor, De Haan discloses a de-interlacer (Fig 1, Column 2, line 61, "three field de-interlacer")

Therefore, it would have been obvious to one of ordinary skilled in the art at the time the invention was made to modify the method disclosed by Apostolopoulos to disclose deinterlacing using a deinterlacer, as taught by De Haan, in order to reduce cost and improve performance (De Haan, Column 4, line 49-65).

11. Regarding claim 16, Apostoloupos discloses the method of claim 3, wherein the plurality of decoders comprises a plurality of MPEG decoders ([0076], therefore, fig 3 shows a plurality of MPEG decoders).

12. Regarding claim 17, Apostoloupos discloses the device of claim 11, wherein the decoding means comprises a plurality of MPEG decoders ([0076], therefore, fig 3 shows a plurality of MPEG decoders).

13. Regarding claim 18, Apostoloupos discloses the method of claim 15, wherein the plurality of decoders comprises a plurality of MPEG decoders ([0076], therefore, fig 3 shows a plurality of MPEG decoders).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LERON BECK whose telephone number is (571)270-1175. The examiner can normally be reached on Monday-Friday 7:30AM-5PM ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Ustaris can be reached on 571-272-7383. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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